DOCUMENT RESUME

ED 288 138 CG 020 311

AUTHOR Epstein, Jennifer A.; And Others
TITLE Attributions for Success and Failure in Smoking Cessation.
PUB DATE Aug 86
NOTE 6p.; Paper presented at the Annual Convention of the American Psychological Association (94th, Washington, DC, August 22-26, 1986). For related document, see CG 020 312.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attribution Theory; *Behavior Change; *Failure; Locus of Control; *Motivation; *Smoking; *Success

ABSTRACT

This study examined the determinants of attributions for success or failure in stopping smoking in a self-help treatment program with and without a drug component. Subjects (N=137) were randomly assigned to one of three experimental conditions: (1) nicotine gum and a self-help manual with an intrinsic motivational orientation; (2) self-help manual with an intrinsic motivational orientation only; and (3) nicotine gum and a self-help manual with an extrinsic motivational orientation. At follow-up interviews, patients rated the extent to which their continued non-smoking or their trouble in quitting completely were influenced by their own efforts, their abilities, the challenge of quitting, an unexpected event, and their doctor. The results revealed a significant main effect for smoking status on internal attributions. Ex-smokers made higher internal attributions for success than did smokers for failure to quit. The interaction of the motivational orientation with status was significant in that smokers in the intrinsic conditions made higher internal attributions for their failure than did smokers in the extrinsic group. Patients' success or failure in quitting influenced their attributions independently of treatment condition. Quitters made more internal and less external attributions for their smoking status than did smokers. These attributions may also predict continued abstinence. (NB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Presented at American Psychological Association

Washington, D.C., August, 1986

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Attributions for Success and Failure in Smoking Cessation

Jennifer A. Epstein, Judith M. Harackiewicz, Carol Sansone
Columbia University University of Utah

Lester W. Blair, & George Manderlink
Columbia University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Jennifer Epstein

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED288138

CG 020311

In this study, we examine the determinants of attributions for success or failure in stopping smoking in a self-help treatment program with and without a drug component (Harackiewicz, Blair, Sansone, Epstein & Stuchell, in press). Internal and external dimensions were measured separately because internal attributions are sometimes made independently of external attributions (Solomon, 1978; Taylor & Koivumaki, 1976). Individuals could realistically make internal and external attributions for their success with treatment. These attributions might be purely external (e.g., "The drug stopped my smoking), a combination of internal and external factors (e.g., "I was able to use the drug effectively"); or purely internal (e.g., "I worked hard").

The elements of treatment and its method of presentation can influence attributions. Components may appear as internally (e.g., self-administered behavioral procedures) or externally (e.g., a drug) based. Even an externally based treatment may be presented with an internal or an external orientation. For example, a drug program might emphasize the individual's role in using the drug, or compliance with a medical regimen. Furthermore, success in treatment can also influence attributions, with individuals more likely to internally attribute success, but to externally attribute failure (Bradley, 1978; Greenwald, 1980). This self-serving bias could have a greater impact on internal attributions than treatment, such that successful quitters would make high internal attributions with any treatment. External attributions for success may therefore be more responsive to treatment characteristics.

Method

Procedure. Subjects (n=137) were randomly assigned to one of three experimental conditions: 1) Intrinsic Gum: nicotine chewing gum and a self-help manual with an intrinsic motivational

orientation (n=45); 2) Intrinsic Self-Help: self-help manual with an intrinsic motivational orientation only (n=47); and 3) Extrinsic Gum: nicotine gum and a self-help manual with an extrinsic motivational orientation (n=45).

The two intrinsic manuals (Self-Help and Gum) focused on individual responsibility and efforts in smoking cessation (e.g., "Your determination and effort will be most important in becoming a non-smoker"), while the third (Extrinsic Gum) highlighted the doctor's prescribed program (e.g., "Following the guidelines of this program will be most important in becoming a non-smoker").

At follow-up interviews, patients rated the extent to which each of the following factors influenced their continued non-smoking (if they had quit, n=50) or their trouble in quitting completely (if unable to quit, n=87): 1) their own efforts, 2) their abilities, 3) the challenge of quitting, 4) an unexpected event, and 5) their doctor. These Smoking Status Attributions ratings ranged from 1 ("not at all") to 7 ("very much"). We constructed two composite measures: Internal Attributions (Own Efforts, Ability, and Challenge) and External Attributions (Unexpected Event and Doctor). Internal and external attributions were orthogonol, ($r(136)=-.09$), as predicted.

Results

We evaluated the impact of smoking status (Smoker vs. Ex-smoker) and the motivational orientation of treatment (Intrinsic vs. Extrinsic) by collapsing across intrinsic conditions in 2 x 2 ANOVA's on attributions. Table 1 presents the means for Smoking Status Attributions. There was a significant main effect for Smoking Status on Internal Attributions ($F(1,131)=28.22$, $p<.001$). Ex-smokers made higher internal attributions for success than smokers did for failure to quit. The interaction of the Motivational Orientation with Status was significant ($F(1,131)=4.38$, $p<.05$). Smokers in the Intrinsic conditions made higher internal attributions for their failure than Extrinsic Gum smokers. However, across treatment conditions, internal attributions were equally high for all ex-smokers.

The Smoking Status main effect was nearly significant for External Attributions ($F(1,130)=3.62$, $p=.059$). Smokers made more external attributions for their failure than ex-smokers did for their success. The interaction of Motivational Orientation with Smoking Status was also nearly significant ($F(1,130)=3.65$, $p=.058$). Extrinsic Gum ex-smokers made higher external attributions for success compared to the intrinsic conditions. In contrast, treatment did not affect smokers' external attributions.

Discussion

Our data allowed us to explore the structure and determinants of attributions for success and failure in a real-life context where success was an important goal (cf. Markus & Zajonc, 1985). Individuals made attributions about their own role independently of attributions about external factors (Solomon, 1978). Patients' success or failure in quitting influenced their attributions independently of treatment condition. Quitters made more internal and less external attributions for their smoking status than smokers. These results suggest that all ex-smokers in this study took personal credit for success. In contrast, smokers blamed external factors for their failure. These findings were obtained as a consequence of a naturally occurring success or failure experience and replicate those found with experimental manipulations of success and failure (Bradley, 1978; McFarland & Ross, 1982).

However, we cannot determine whether the bias reflects motivational or cognitive factors (cf. Miller & Ross, 1975). While the results are consistent with an attributional bias, the ex-smokers' pattern of attributions also reflects stopping smoking with self-help materials.

Attributions were affected by our manipulation of treatment externality, but these effects were moderated by the self-serving bias. Our manipulation was "successful" in affecting internal attributions only for subjects who failed to quit. Smokers in the two intrinsic conditions made more internal attributions for their failure than extrinsic gum smokers. This may pose a problem for individuals unable to succeed initially with an intrinsic program if they perceive themselves as incapable of ever stopping (cf. Dweck & Goetz, 1978; Wilson & Linville, 1985).

Our manipulation influenced external attributions for subjects who managed to quit smoking, as predicted. Extrinsic Gum quitters were more likely to attribute their success to another individual (the doctor) or to chance (an unexpected event) than intrinsic condition quitters. It is important to note the specificity of the effects on attributions. In the case of failure, external attributions were unaffected by treatment condition. Conversely, when subjects succeeded, their internal attributions could not be further enhanced.

These attributions may also predict continued abstinence. Successful quitters' attributions may be related to the length of time they will remain ex-smokers. Davison and Valins (1969) suggest that internal attributions may promote continued behavior change. However, our results suggest further clarification: are internal attributions beneficial, or are external attributions deleterious? We are currently pursuing these issues.

Note

For an extended report, please write to Judith Harackiewicz, Department of Psychology, Schermerhorn Hall, Columbia University, New York, New York, 10027. This research was supported by a grant from Merrell Dow Pharmaceuticals, Inc. to the second author.

References

Bradley, G.W. (1978). Self-serving biases in the attribution process: A re-examination of the fact or fiction question. Journal of Personality and Social Psychology, 36, 56-71.

Davison, G.C. & Valins, S. (1969). Maintenance of self-attributed and drug-attributed behavior change. Journal of Personality and Social Psychology, 11, 25-33.

Dweck, C.S. & Goetz, T.E. (1978). Attributions and learned helplessness. In J.H. Harvey, W. Ickes & R.F. Kidd (Eds.), New Directions in Attribution Research, Hillsdale, NJ: Erlbaum Associates.

Harackiewicz, J.M., Blair, L.W., Sansone, C., Epstein, J.A. & Stuchell, R.N. (in press). Nicotine gum and self-help manuals in smoking cessation: An evaluation in a medical context. Addictive Behaviors.

Markus, H. & Zajonc, R.B. (1985). The cognitive perspective in social psychology. In G. Lindzey and E. Aronson (Eds.), The handbook of social psychology, Vol. 1, 3rd Edition. NY: Random House, 137-230.

Miller, D.T. & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction? Psychological Bulletin, 82, 213-225.

McFarland, C. & Ross, M. (1982). Impact of causal attributions on affective reactions to success and failure. Journal of Personality and Social Psychology, 43, 937-846.

Solomon, S. (1978). Measuring dispositional and situational attributions. Personality and Social Psychology Bulletin, 4, 589-594.

Taylor, S.E. & Koivumaki, J.H. (1976). The perception of self and others: Acquaintanceship, affect, and actor-observer differences. Journal of Personality and Social Psychology, 33, 403-408.

Wilson, T.D. & Linville, P. (1985). Improving the academic performance of college freshman with attributional techniques. Journal of Personality and Social Psychology, 49, 287-293.

Table 1

Means for Smoking Status Attributions

	Intrinsic Conditions	Extrinsic Gum	Overall Mean	SD
Internal attributions[a]				
Smokers	14.21	11.84	13.53	4.05
Ex-smokers	16.70	17.30	16.94	3.59
External attributions[b]				
Smokers	6.30	5.56	6.08	3.41
Ex-smokers	4.43	6.05	5.08	3.14

[a] Range: 3-21
[b] Range: 2-14